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IN THE US PATENT OFFICE

EXAMINER - Snay

GROUP - 1743

SN - Division 1 of 09/562,317

FILED - concurrently herewith

BY - Tanaami

I hereby certify that the correspondence upon which this notice is placed is being deposited with the US Postal Service as first class mail in an envelope addressed to the Commissioner for Patents, Box 1450 Alexandria, VA 22313, or to US Trademark Office, 2900 Crystal Drive, Arlington, VA 22202, on the date set forth below. MOONRAY KOJIMA, ATTORNEY

Date 1/30/04 (signed)

PRELIMINARY AMENDMENT

SIRS:

Kindly amend the aboveddivisional application (#1) as follows:

Claims 7-21 and 23-31, cancel without prejudice.

Claim 22,line 1, change change "1 to 9" to be -- 1-6 --

Claim 32, line 1, change "1 to 3 and 5 to 9" to be --- 1, 2, 3, 5, and 6 ---.

REMARKS

Claims 1 -6, 22 and 32 are in the application (that is in this divisional #1). The remaining claims have been cancelled to expedite prosecution. Claims 10-21 and 23-31 form the basis for the divisional application #2 filed concurrntly herewith.

Examination anddallowance are respectfully solicited.

respectfully

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1. (original) In a biochip reader for reading image data of a plurality of samples using an optical detector by irradiating light at a biochip having said plurality of samples arranged thereon in spots or arrays, the improvement comprising:

arranging means for arranging multiple pieces of spectroscopic information of a sample in spaces among images.

2. (original) The reader of claim 1, wherein said arranging means comprises a grating, a combination of an optical filter and optical shift means or Fourier spectrometer, disposed between said plurality of samples and said optical detector.

3. (original) The reader of claim 1, wherein said arranging means comprises means for developing spectroscopic information on said optical detector in a two dimensional manner when said plurality of samples are arranged in spots.

4. (original) The reader of claim 1,wherein said arranging means comprises a microscope selected from the group consisting of a scanning confocal microscope, a non-scanning confocal microscope, and a dual grating excitation microscope.

5. (original) The reader of claim 1, further comprising separating means for separating signals of said spectroscopic information from noise by using known spectra and a regression method.

6. (original) The reader of claim 1, further comprising aperture means for restricting area of spectroscopy, said aperture means being aligned with position of each sample or with a part of each sample.

Claims 7-21 (cancelled herewith).

22.(amended herewith) The reader as defined in any of claims 1 - 6, wherein said biochip comprises a transparent substrate to allow passage of excitation light and fluorescent light, and wherein said excitation light is irradiated from one side of said biochip which is opposite to a side where said plurality of samples are arranged.

Claims 23-31 (cancelled herewith)

32. (amended herewith) The reader as defined in any of claims 1,2, 3,5 and 6, wherein said arranging means comprises a microscope selected from the group consisting of a scanning confocal microscope, a non-scanning confocal microscope, and a 2 photon excitation microscope, said microscope being configured so that a sample scanned with excitation light and a fluorescent pattern of said sample produced by said excitation light is detected.